Form RE-03 REQUIREMENTS: PSD

PREVENTION OF SIGNIFICANT DETERIORATION (PSD)

(567 IAC 22.4 *Special requirements for major stationary sources located in areas designated attainment or unclassified (PSD) and 567 IAC Chapter 33: Special Regulations and Construction Permit Requirements for Major Stationary Sources – Prevention of Significant Deterioration (PSD) of Air Quality*; PSD 40 CFR 52.21)

The State of Iowa has committed to establishing and maintaining National Ambient Air Quality Standards (NAAQS). A plan is set forth (as described in 40 CFR 52 subparts A and Q) for the state to prevent the significant deterioration (PSD) of air quality in any portion of the State where the existing air quality is better than the National Ambient Air Quality Standards. Included in this plan, and reflected in state rule (567 IAC chapters 20-34), are requirements for air pollution sources to undergo review and obtain permits to construct and modify air pollution sources.

This form will assist you in determining whether your facility may be considered to be a "**Major Stationary Source**" of air pollution and subject to Prevention of Significant Deterioration (PSD) review as a part of Iowa's air quality permitting process.

Sources which are not considered to be Major Stationary Sources may be subject to air permitting review. The construction and modification of air contaminant sources in Iowa are regulated under Code of Iowa Chapter 455B and 567 Iowa Administrative Code chapters 20 - 34.

Throughout this form you are asked for the **Potential to Emit (PTE)** of the facility. The PTE values, in most cases, are defined as the maximum uncontrolled PTE of the emission facility. In some cases, PTE calculations may reflect factors such as control equipment or permit limitations, but ONLY if proof is given that such factors were provisions of a federally enforceable permit issued to the facility.

Hydrogen Sulfide, Fluorides, Sulfuric Acid Mist, Total Reduced Sulfur, Municipal Waste Combustor (MWC) Organics, MWC Metals, and MWC Acid Gases are regulated pollutants for Major Stationary Source modifications, and they are included here for that reason. Few facilities emit these pollutants (compared to criteria pollutants) and no forms specific to those calculations are provided herein. Facilities emitting these pollutants are responsible for calculating PTE on these pollutants and considering the applicability of PSD. Please refer to 567 IAC 33.3(1) – definition of "regulated NSR pollutant" for a complete list of pollutants that are regulated by the PSD program.

If, after COMPLETING this form you determine that the facility is a Major Stationary Source or are unsure of whether the facility is subject to PSD - READ and become familiar with the requirements of:

40 CFR 52.21 Subpart A (General Provisions) and,
40 CFR 52 Subpart Q (Iowa)
567 Iowa Administrative Code section 22.4 and chapter 33

This form is complex, but addresses a complicated regulatory program. Each item is intended to assist you in the process of determining applicability as easily and quickly as possible. In this form you will establish the facility threshold -- a potential pollutant level -- for your facility. You will also determine if, based on you current threshold, you are considered a **Major Stationary Source** under PSD. Finally some additional information regarding modifications to Major Stationary Sources will be provided.

Information submitted on this form should accurately reflect the source at the time of application submission. It may be possible for sources that are Major Stationary Sources to become synthetic minor facilities. If sources wish to pursue this option refer to **Part 2, Section 4 - Proposals (Limits & Alternatives)**.

1) Is the facility defined as one of the following (some SIC codes applying to specific categories are given in parentheses)? Please indicate the categories the facility belongs to by checking the boxes next to the category numbers in the table.

	SOURCE CATEGORY	SIC		SOURCE CATEGORY	SIC
1 ☐	Fossil fuel-fired steam electric plants of more than 250 MMBtu/hr		15 ☐	Phosphate rock processing plants	(1475)
2 ☐	Coal cleaning plants (with thermal dryers)		16 ☐	Coke oven batteries	(3312)
3 ☐	Kraft pulp mills	(2611, 2621)	17 ☐	Sulfur recovery plants	(2819)
4 ☐	Portland cement plants	(3241)	18 ☐	Carbon black plants (furnace process)	(2895)
5 ☐	Primary zinc smelters	(3339)	19 ☐	Primary lead smelters	(3339)
6 ☐	Iron and steel mills	(332x)	20 ☐	Fuel conversion plants	
7 ☐	Primary aluminum ore reduction plants	(3334)	21 ☐	Sintering plants	
8 ☐	Primary copper smelters	(3331)	22 ☐	Secondary metal production plants	(334x)
9 ☐	Municipal incinerators capable of charging more than 250 tons of refuse per day		23 ☐	Chemical process plants (*)	(28xx)
10 ☐	Hydrofluoric acid plants	(2819, 2899)	24 ☐	Fossil-fuel boilers (or combination thereof) totaling more than 250 MMBtu/hr	
11 ☐	Sulfuric acid plants	(2819)	25 ☐	Petroleum storage & transfer units, total storage capacity over 300,000 barrels	
12 ☐	Nitric acid plants	(2873)	26 ☐	Taconite ore processing plants	(1011)
13 ☐	Petroleum refineries	(2911)	27 ☐	Glass fiber processing plants	
14 ☐	Lime plants	(3274)	28 ☐	Charcoal production plants	(2819, 2861)

(*) Excluding ethanol production facilities that produce ethanol by natural fermentation included in NAICS codes 325193 or 312140.

☐ NO, the facility IS NOT classified as one of the 28 listed source categories. Go to question 2.

☐ YES, the facility IS classified as one of the 28 listed source categories. An air emission source that is classified as one of the 28 sources listed above, and having PTE (potential to emit) of 100 TPY (tons per year) or more of any single regulated pollutant is considered a "**MAJOR STATIONARY SOURCE**."

2) Facilities not defined by the 28 source categories listed in question 1 and located in attainment areas are considered to be a "**MAJOR STATIONARY SOURCE**" if the source has a potential to emit more than 250 TPY of any single regulated pollutant. Sources operating in attainment areas - for the remainder of questions in **Form RE-03** - the **Major Stationary Source threshold** is: 250 TPY for all regulated air pollutants.

3) In the boxes below, enter the current PTE of your entire facility for each regulated pollutant (information from Form 1.5 Potential Emissions - Significant Activities):

PM	PM-10	SO_2	NO_x	VOC	CO	Lead

4) Is the current PTE of the facility greater than or equal to the 100/250 TPY threshold for your facility, making your facility a **Major Stationary Source**?

☐ NO, the facility IS NOT a Major Stationary Source and therefore is not presently subject to Prevention of Significant Deterioration (PSD) requirements. Go to Form **RE-00 REQUIREMENTS REVIEW**, question 2b and check NO.

☐ YES, the facility is currently considered a Major Stationary Source.

Facilities that are Major Stationary sources should become familiar with the requirements that PSD establishes for "grouping" physical changes or changes made in the method of operation of a Major Stationary Source made during the same budget or planning period as a single modification. Changes need to be grouped together based on budgeting or planning periods and evaluated as *one* modification to determine if PSD applies to the changes that have been made. Significant increases in emissions at Major Stationary Sources would equal or exceed any of the following rates:

Pollutant	Tons/Year	Pollutant	Tons/Year
PM	25	Sulfuric Acid Mist	7
PM-10	15	Hydrogen Sulfide	10
SO_2	40	Total Reduced Sulfur	10
NO_x	40	Reduced Sulfur Compounds	10
VOC	40	MWC Organics	0.0000035
CO	100	MWC Metals	15
Lead	0.6	MWC Acid Gases	40
Fluorides	3	MW Solid Waste Landfill (NMOC)	50

Note: See 567 IAC 33.3(1) - definition of "significant" for a complete list of situations that constitute significant increases in emissions at major stationary sources.

5) ☐ NO, the construction, physical change or change in the method of operation at the facility DOES NOT constitute a significant increase in emissions. Return to Form **RE-00 REQUIREMENTS REVIEW** and check NO on question 2b.

☐ YES the construction, physical change or change in the method of operation at the facility **DOES** constitute a significant increase in emissions. Return to Form **RE-00 REQUIREMENTS REVIEW** and check **YES** on question 2b.